

Thoughts Feelings Emotions Interoception

In everyday language, *thoughts*, *feelings*, and *emotions* are often used as if they meant the same thing. Scientifically, however, they refer to **different levels of processing** within the mind–body system. They are distinct in nature, not interchangeable, yet deeply linked through **interoception**, the process that connects bodily states to mental experience.

Feelings are the most basic level. They are **bodily sensory experiences** arising from physiological activity: changes in heart rate, breathing, muscle tone, visceral activity, hormonal and autonomic shifts. Feelings are experienced as sensations such as tightness, warmth, pressure, heaviness, trembling, or ease. They are continuous, graded, and non-conceptual. At this level, there is no interpretation or meaning yet—only what the body is doing, experienced from the inside.

Interoception is the process by which the brain **detects, integrates, and organizes these internal bodily signals**. Through interoception, raw bodily sensations become coherent and accessible to awareness. This process involves neural systems that monitor the internal state of the body and integrate that information with context, memory, and prediction. Interoception is not a thought and not an emotion; it is the **mechanism that links bodily sensation to subjective experience**.

Emotions emerge when interoceptive signals are organized into **coherent, functional patterns**. An emotion reflects the overall state of the organism and its readiness for action in a given context. Emotions are shaped by learning, memory, culture, and situational meaning. They are categorical (such as fear, anger, sadness, or joy), whereas feelings are continuous. Emotions depend on bodily feelings, but they are not identical to them.

Thoughts operate at a different level. They are **symbolic, conceptual, and linguistic processes**: beliefs, evaluations, interpretations, mental images, and narratives. Thoughts label, explain, judge, and predict emotional experience. They can influence attention and expectation and can indirectly affect bodily states, but they are not themselves bodily sensations.

The relationship between these processes follows a consistent direction: physiological activity gives rise to **feelings**; interoception integrates those feelings; **emotions** emerge as organized patterns; and **thoughts** interpret and narrate what is being experienced. They are deeply linked because each level depends on the one

below it, but they are not interchangeable because each has a different function and operates in a different form—sensory, organizational, or symbolic.

In short: **feelings are bodily sensations, interoception integrates them, emotions are constructed patterns based on that integration, and thoughts are the conceptual interpretations of those patterns.**